EXHIBIT

Exhibit No.: 301
Issue(s): Rate design
Low-income weatherization
Solar rebates
Witness/Type of Exhibit: Marke/Rebuttal
Sponsoring Party: Public Counsel
Case No.: ER-2014-0370

REBUTTAL TESTIMONY

OF

GEOFF MARKE

Submitted on Behalf of
the Office of the Public Counsel

KANSAS CITY POWER & LIGHT COMPANY

Case No. ER-2014-0370

May 7, 2015

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service.	))))	Case No. ER-2014-0370

AFFIDAVIT OF GEOFF MARKE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Geoff Marke, of lawful age and being first duly sworn, deposes and states:

1. My name is Geoff Marke. I am a Regulatory Economist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Geoff Marke

Subscribed and sworn to me this 7th day of May 2015.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI
JERENE A. BUCKMAN
My Commission Expires
August 23, 2017
Cole County
Commission #13754037

Jerene A. Buckman
Notary Public

My Commission expires August 23, 2017.

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REBUTTAL TESTIMONY

OF

GEOFF MARKE

KANSAS CITY POWER & LIGHT COMPANY

CASE NO. ER-2014-0370

I. INTRODUCTION

Q. Please state your name, title and business address.

A. Dr. Geoffrey Marke, Economist, Office of the Public Counsel (OPC or Public Counsel), P.O. Box 2230, Jefferson City, Missouri 65102.

Q. Are you the same Dr. Marke that filed direct testimony in ER-2014-0370.

A. I am.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of this testimony is to respond to direct testimony regarding:

- Rate Design comments in favor of a 177 percent increase to the residential customer charge from:
  - Kansas City Power and Light (KCPL) witness Tim Rush
- Low-Income Weatherization Program (LIWAP) recommendations from:
  - Division of Energy (DE) witness John Buchanan
- KCPL's request to include $7,664,452 in rate base for recovery of solar rebates from:
  - KCPL witness Tim Rush

Q. Please summarize your primary positions and conclusions.

A. Public Counsel recommends that the Commission:

- Reject KCPL's proposal to increase residential customer fixed charges by 177%.
- Support DE's proposal to allocate future LIWAP funding into base rates following the conclusion of KCPL's MEEIA Cycle I.

II. RATE DESIGN

Increase in the Residential Customer Charge

Q. Please summarize Mr. Rush's argument for a 177 percent increase to the customer charge for the residential class.

A. Mr. Rush provides a general description about purported distortions in fixed/variable cost allocations between customer classes by explaining that residential customers only have two cost components—the customer charge and the energy charge; while Commercial and Industrial customers have up to four components—the customer charge, facility charge, demand charge, and energy charge.

The residential class, Mr. Rush explains, has the majority of their "fixed" costs embedded in the energy charge due to historical preference, policy considerations, and based on the perception that a low customer charge would serve as a "protection" for low-income customers. According to Mr. Rush, this practice was acceptable to KCPL since at least 2012, during the Company's last rate case, due to periods of continued load growth.

Although not explicitly stated, Mr. Rush then implies that KCPL is no longer operating in a period of continued and/or expected load growth and therefore the recovery of embedded fixed costs through the energy charge in the residential customer class has to be abandoned in favor of a guaranteed return through the customer charge. This allocation shift results in a

177 percent overall increase and a complete departure from the Company's previous CCOS reports to date. Mr. Rush explains:

> From the Company perspective, **reductions in usage, driven by reduced customer growth, energy efficiency, or even self-generation**, result in under recovery of revenues. Growth would have compensated or completely covered this shortfall in the past. With the accelerating deployment of initiatives that directly impact customer growth, it is becoming increasingly difficult for the Company to accept this risk of immediate under recovery (emphasis added).[1]

Mr. Rush then attempts to pacify anticipated objections on the impact of a 177 percent increase to the customer charge as it pertains to low-income customers by offering a graphical presentation of an energy usage analysis comparison between a random sample of KCPL residential customers and KCPL Low-Income Home Energy Assistance Program (LIHEAP) recipients. His analysis suggests that only 37 percent of low-income ratepayers are at-or-below-average usage customers, thus implying that low-income customers actually consume, on average, more electricity annually than the average residential customer in KCPL's service territory.

Finally, Mr. Rush points out that KCPL is requesting to expand its Economic Relief Pilot Program's expenditure amount and to direct any unspent funds to the Dollar-Aide program "to support low income customers unable to benefit under the proposed rate design."[2]

I will respond to each of these points in turn.

[1] ER-2014-0370 Direct Testimony of Tim Rush p. 60, 8 - 13.
[2] ER-2014-0370 Direct Testimony of Tim Rush p. 69, 10, & 70, 1.

Q. Is KCPL's residential class experiencing a period of reduced energy usage?

A. No. In 2014, KCPL's residential class MWh use per customer (both actual and weather normalized) was the highest it has been since 2011 based on the Company's work papers in their recently filed triennial integrated resource plan (IRP) analysis in EO-2015-0254. Table 1 is an excerpt of that data with emphasis placed on the change in ten-year usage to date to show that KCPL's residential class is not experiencing a period of reduced energy usage.

<u>Table 1: KCPL residential MWh use per customer 2005 - 2014</u>

Plot 3A-9 Missouri & Kansas Resiential MWH Use Per Customer (Actual vs. Weather Normalized)

Year	Actual Missouri Summer Jun-Sep	WN Missouri Summer Jun-Sep	Actual Missouri Non-Summer Oct-May	WN Missouri Non-Summer Oct-May	Actual Missouri Total Jan -Dec	WN Missouri Total Jan -Dec
2005	4.63	4.40	6.29	6.24	10.92	10.64
2006	4.80	4.26	6.09	6.44	10.89	10.70
2007	4.64	4.44	6.50	6.42	11.14	10.87
2008	4.08	4.37	6.66	6.52	10.74	10.89
2009	3.89	4.36	6.53	6.65	10.42	11.01
2010	4.76	4.21	6.64	6.54	11.40	10.76
2011	4.73	4.32	6.55	6.45	11.28	10.77
2012	4.83	4.12	6.02	6.45	10.85	10.57
2013	4.07	4.21	6.73	6.47	10.80	10.68
2014	4.22	4.25	6.77	6.45	10.99	10.71
05-'09	-4.3%	-0.2%	0.9%	1.6%	-1.2%	0.9%
10-'14	-3.0%	0.2%	0.5%	-0.3%	-0.9%	-0.1%
05-'14	-1.0%	-0.4%	0.8%	0.4%	0.1%	0.1%

2005 – 2014 MWh use per res. customer
+ 0.1% Actual
+ 0.1% Weather Normal

Q. Is KCPL projected to experience reduced energy usage in the future?

A. No, according to KCPL's triennial IRP analysis in Volume 3—Load Analysis and Load Forecasting the first two highlighted bullet points read as follows:

- KCP&L expects energy consumption to grow .6% and peak demand to grow .7% annually from 2015-2035.
- Residential energy consumption is expected to provide the most growth over the next 20 years.[3]

Not only is energy consumption expected to grow, the residential class is expected to provide the *most* growth in consumption over the next 20 years.

Q. Is KCPL experiencing a period of reduction in residential customers?

A. No, 2014 represented the single largest number of KCPL residential customers to date at 240,585. Table 2 is an excerpt from the Company's work papers in EO-2015-0254 which shows a consistent increase in the number of residential customers from 2005 to 2014.

[3] EO-2015-0254 Kansas City Power & Light Company Integrated Resource Plan (April, 2015) Volume 3: Load Analysis and Load Forecasting p. 1.

Table 2: KCPL residential customers 2005-2014

Plot 3A-1: Missouri & Kansas Residential Customers

Year	Missouri Summer Jun-Sep	Missouri Non-Summer Oct-May	Missouri Total Jan -Dec
2005	236,455	236,691	236,612
2006	238,412	238,378	238,389
2007	238,405	238,786	238,659
2008	238,663	239,050	238,921
2009	238,695	239,258	239,070
2010	239,265	239,767	239,600
2011	238,909	239,204	239,105
2012	238,629	238,849	238,776
2013	239,146	239,089	239,108
2014	240,192	240,782	240,585
05-'09	0.24%	0.27%	0.26%
10-'14	0.10%	0.11%	0.10%
05-'14	0.17%	0.19%	0.19%

KCPL residential customer growth

05-'09	+ 0.26%
10-'14	+ 0.10%
05-'14	+ 0.19%

Q. Is KCPL expected to experience a reduction in residential customers in the future?

A. No. According to the Company's response to OPC's data request 2060, residential customers will increase each year as follows:

- 2015 241,619
- 2016 242,362
- 2017 243,063
- 2018 243,696
- 2019 244,267

2015-2019

Projected increase in residential customers

+1.09%

Q. Are reductions in energy usage due to energy efficiency a valid concern?

A. Not for KCPL, because they were approved for a Missouri Energy Efficiency Investment Act (MEEIA) portfolio in July of 2014. The Company now has a financial incentive to promote energy efficiency for predetermined energy and demand saving targets.

Q. Would a 177 percent increase in the residential customer charge negatively impact the Company's MEEIA Cycle I portfolio?

A. Yes. First, it is important to know that the Company's MEEIA portfolio already is designed to capture a portion of embedded fixed costs in the throughput disincentive. The Company omits this fact in their testimony and consequently understates the actual amount of embedded fixed costs that already are being recovered in a customer's bill. The Demand Side Investment Mechanism (DSIM) surcharge on the residential customer's bill is an additional cost borne by ratepayers each month since the last rate case; thus, the 177 percent increase tied to fixed cost recovery is actually considerably larger if the DSIM surcharge is considered. This, however, raises additional issues.

For example, increasing the customer charge at this level would diminish the payback period for all customers' energy efficiency efforts promoted by the Company to date. The cost-effective calculations would be reduced across the board for residential ratepayers, which will impact financial decisions and prolong future payback assumptions. In short, the Company would be promoting inefficiency and consumption indirectly by denying residential customers the conservation and efficiency savings they expect from their energy efficiency investments.

Of course, just as past and future customer benefits are minimized, so too are the Company's cost recovery assumptions. The prudence of KCPL's MEEIA Cycle I cost recovery would need to be scrutinized from a different perspective, as the DSIM that was approved would no longer be applicable to the environment in which it is operating. For example, net shared benefit assumptions would be categorically smaller for all of the residential programs. The Company's expected earnings would need to be reduced to reflect this new reality. And because energy efficiency potentially would no longer be a least cost resource, the company will have to look for more costly fuel sources to meet load growth and future environmental compliance regulations, thus collectively raising future costs at an unnecessary level.

Q. Would a 177 percent increase in the residential customer charge negatively impact KCPL's MEEIA Cycle II application?

A. Yes, a 177 percent increase to the residential customer charge would more than likely prevent KCPL and GMO from filing a joint MEEIA Cycle II application, at least insofar as the residential class is concerned—since they are the only customer class being singled out for this change.

Q. Please explain.

A. KCPL's MEEIA Cycle I application was designed and approved to last for only one and a half years. This is because GMO would be concluding their MEEIA Cycle I in 2015. The plan developed by the Company and stakeholders was that MEEIA Cycle II would be a jointly designed, marketed, implemented, administered, and evaluated application between the two utilities. This would reduce customer confusion over eligibility and program offerings and minimize free ridership. If the 177 percent customer charge increase for the residential class were approved, joint delivery of MEEIA between the two utilities would be highly unlikely. This is because the assumptions embedded in KCPL's market potential study are predicated on energy efficiency acceptance rates under a rate design where customers have more control over their bill.

If such a MEEIA application were submitted, it would likely be heavily targeted at the Commercial and Industrial customers as the pay-back assumptions for energy efficiency would be diminished considerably for residential customers.

The depth, complexity, and impact of both scenarios (KCPL's MEEIA Cycle I and II) is beyond the scope of this testimony. I raise them only to illustrate that increasing the residential customer charge does not take place in a regulatory vacuum. The Company's rate design is now highly interdependent with the many surcharge mechanisms that KCPL collects separately on the customer bill. The Commission, Company, and stakeholders should be cognizant of the potential unintended consequences that are embedded in a departure from how rates are traditionally designed and the impact on current Commission approved policy directions.

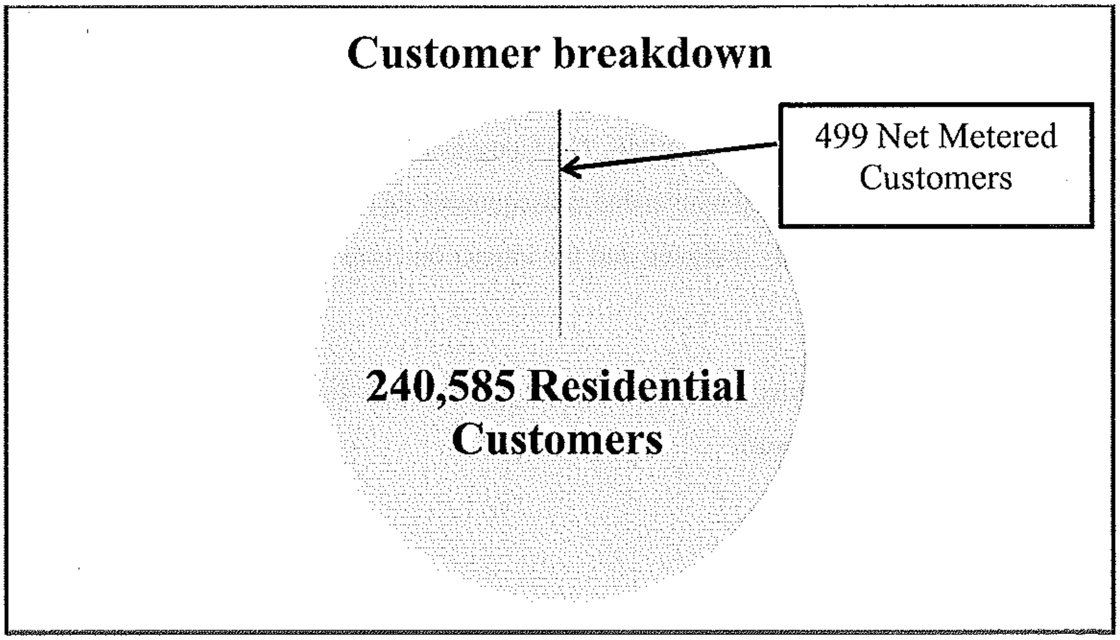
Q. Is net metering activity to date a valid justification for a 177 percent residential customer charge increase?

A. No.

Q. Do we have any idea how many net metered ratepayers are in KCPL's service territory?

A. Yes, we do. According to KCPL's 2014 Renewable Energy Standard Compliance Report filed in EO-2015-0263 the customer breakdown can be seen in figure 1.

Figure 1: Current amount of net metered customers in KCPL's service territory



Q. Will net metering be a valid concern in the near future?

A. Absent a dramatic reduction in costs, rooftop solar will remain out-of-reach for the vast majority of ratepayers in KCPL's service territory because there are no longer any available solar rebates available from ratepayers . Furthermore, according to KCPL's 2015 Renewable Energy Standard Compliance Plan in EO-2015-0265 there won't be any rebates from ratepayer funds available in the future:

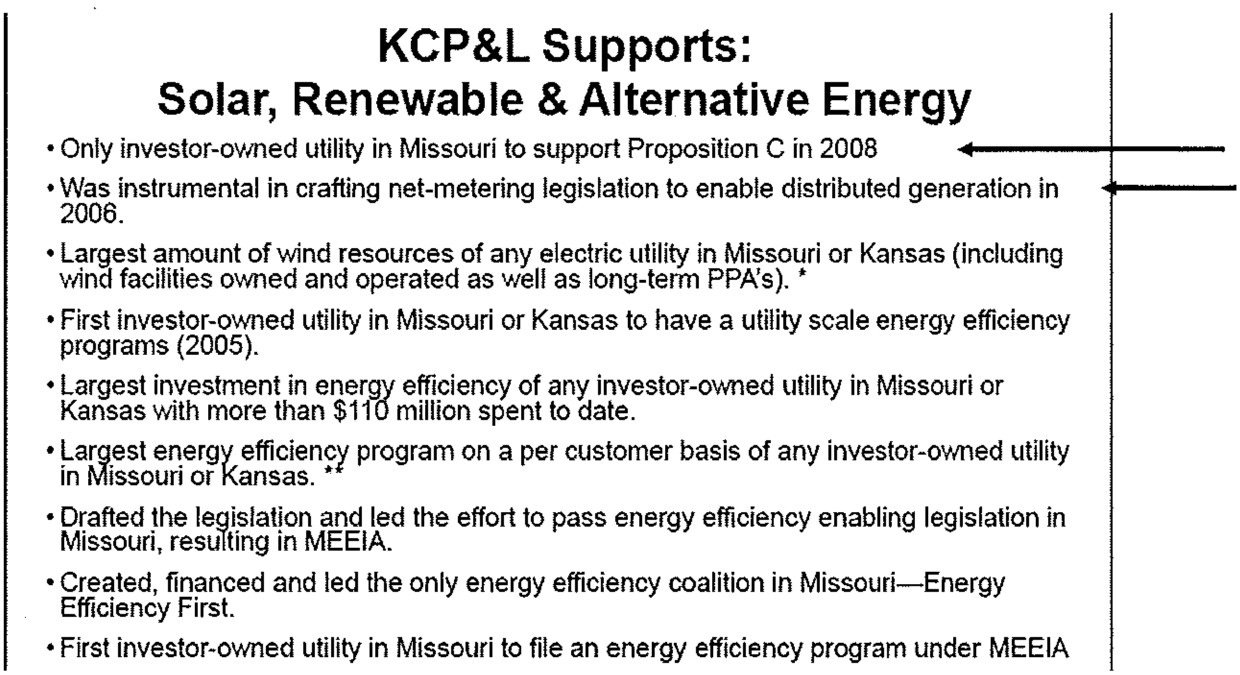
> KCP&L anticipates that the acquisition of Solar Renewable Energy Credits (SRECs), principally from KCP&L retail customers that have received rebates for solar facility installations, will be sufficient for compliance with the Missouri solar energy requirements for the 2015 to 2017 RES Compliance Plan period. . . . Additionally, in 2016 KCP&L expects to add 3

MW of solar resources consisting of Commercial and Industrial rooftop installations owned by KCP&L.[4]

As it stands, it appears as though KCPL will have satisfied their Missouri Renewable Energy Standard solar requirement for the foreseeable future making any further ratepayer funded subsidization highly unlikely.

Citing net metering as the basis for increasing the customer charge 177 percent in this proposal is even more perplexing given KCPL's past support of solar and renewable energy in Missouri. For example, they were the only IOU in Missouri to support Proposition C in 2008. KCPL was also instrumental in crafting net-metering legislation to enable distributed generation in 2006. Both points were introductory bulleted items listed on KCPL's "Distributed Solar Energy Discussion" presentation to the Missouri Public Service Commission on June 25, 2014 and are reprinted here for reference in figure 2.

Figure 2: KCPL Solar Presentation to the Commission, slide 3



[4] EO-2015-0265 KCPL Renewable Energy Standard Compliance Plan p. 5-6.

Putting aside for a moment arguments from environmentalists over the value of solar, and utilities arguments over the value of the grid, it seems wholly inappropriate to let 499 net metered customers be the central argument for a 177 percent increase to the customer charge for the approximately quarter of a million residential customers.

Missouri does not have a high solar penetration and certainly not high enough to warrant the level of anxiety and proposed rate design actions that the Company would have the Commission take. Table 3 presents the capacity and energy by resource type in KCPL's service territory. Note that solar represents only 0.001% of the annual energy generation.

Table 3: KCPL capacity and energy by resource type[5]

Table 2: Capacity and Energy By Resource Type

Resource Type	Capacity (MW)	% of Total Capacity	Estimated Energy (MWh)	% of Annual Energy
Coal	2,691	52%	16,657,929	69%
Nuclear	549	11%	4,076,020	17%
Oil	375	7%	0	0%
Nat. Gas	808	15%	155,574	1%
Wind	730*	14%	2,993,481	12%
Hydro	62	1%	181,326	1%
Solar	0.2	0.003%	140	0.001%
Total	5,215	100%	24,064,470	100%
*Nameplate Capacity				

Q. Please respond to Mr. Rush's data comparing a sample of residential customer's usage with LIHEAP customer's usage data.

A. The use of LIHEAP customer usage data is an inappropriate sample for this exercise. This is because heating/cooling assistance and energy crisis assistance are effectively energy subsidies for low-income households and are more likely to *increase* energy consumption

[5] EO-2015-0254 Kansas City Power & Light Company Integrated Resource Plan (April, 2015) Volume 1: Executive Summary p. 4.

than to decrease it. Thus, the vast majority of the funding for LIHEAP serves to increase energy consumption, and the program, in net, likely has a positive effect on energy consumption.

Not only is Rush's comparison inappropriate, it generalizes the conclusion about LIHEAP recipients to all low-income households. The vast majority of low-income households fail to get any LIHEAP funding. A low-income household that gets some form of financial energy assistance is an exception, not the norm. According to the U.S. Department of Health and Human Services (HHS):

> In FY2009, the most recent year for which HHS data are available, an estimated 35 million households were eligible for LIHEAP under the federal statutory guidelines. According to HHS, 7.4 million households received heating or winter assistance and approximately 900,000 households received cooling assistance in that year.[6]

That means, based on the most recently available data from 2009, LIHEAP reached only 21% of the eligible households in the United States.

Now consider that information within the context of what Mr. Rush would have the Commission believe about consumption for all low-income ratepayers in KCPL's service territory. KCPL suggests that 72 percent of all low-income households are consuming more energy than the "average" KCPL residential household. Instead, at best, KCPL's data stands for the entirely unremarkable proposition that the LIHWAP program is doing what it intended to do, which is heat and cool homes, thereby increasing energy consumption.

[6] Perl, L. (2013) LIHEAP: Program and Funding. Congressional Research Service Report for Congress 7-5700. P. 1 http://neada.org/wp-content/uploads/2013/08/CRSLIHEAPProgramRL318651.pdf

Q. Does OPC believe that an increased customer charge would negatively impact low-income customers?

A. Yes, low-income, low-usage customers, customers on fixed incomes, and small general service customers that are seasonal in nature can all be seen as customer groups with inelastic demands (which often means without substitutes), and would all be subject to paying a higher mark-up above marginal costs than another type of customer in KCPL's proposal. This can be viewed as a form of price discrimination. On average, low-income households in Missouri spend 14% of their annual income just on energy costs, whereas middle and higher income families usually pay 3-6%.[7] This means low-income families will often have to make difficult choices over necessities such as food, medication, housing, and utility bills.

An additional argument also can be made that customer charges should not be mistaken for demand charges. They are not the same thing. KCPL's proposal is essentially to treat three different cost components (energy, demand and customer) as two (variable and fixed). This distorts the price signal and forces high-demand and low-demand customers to pay the same amount of "fixed" costs, even though the demand characteristics of these customers are different.

Q. Could you provide an illustrative example of how demand characteristics may differ?

A. Low-income customers, and in particular, low-income multi-family housing customers are likely to use proportionally less peak energy than larger customers.[8, 9] This is because low-income multi-family housing customers typically live in smaller dwellings, have fewer discretionary appliances and are much more likely to have non-peak appliances—refrigerators, lights, and electronic equipment—than peak appliances—clothes washer and

[7] Missourians to end poverty coalition (2014) State of the State Poverty Report. http://mediad.publicbroadcasting.net/p/kwmu/files/201401/PovertyInMissouri.pdf

[8] Brockway, N. (2008) Advanced Metering Infrastructure: What regulators need to know about its value to residential customers. National Regulatory Research Institute. xi. http://nrri.org/pubs/multiutility/advanced_metering_08-03.pdf

[9] Faruqu, A., Sergici, S. & J. Palmer (2010) The Impact of Dynamic Pricing on Low Income Customers IEE Whitepaper. http://www.edisonfoundation.net/IEE/Documents/IEE_LowIncomeDynamicPricing_0910.pdf

dryer.[10] Differences in demand characteristics also extend to differences in electricity consumption. This can be seen in Figure 3 which includes a 2010 KEMA study on California electricity use by income.

Figure 3: Average Electricity and Natural Gas Consumption by Income in California (2010)[11]

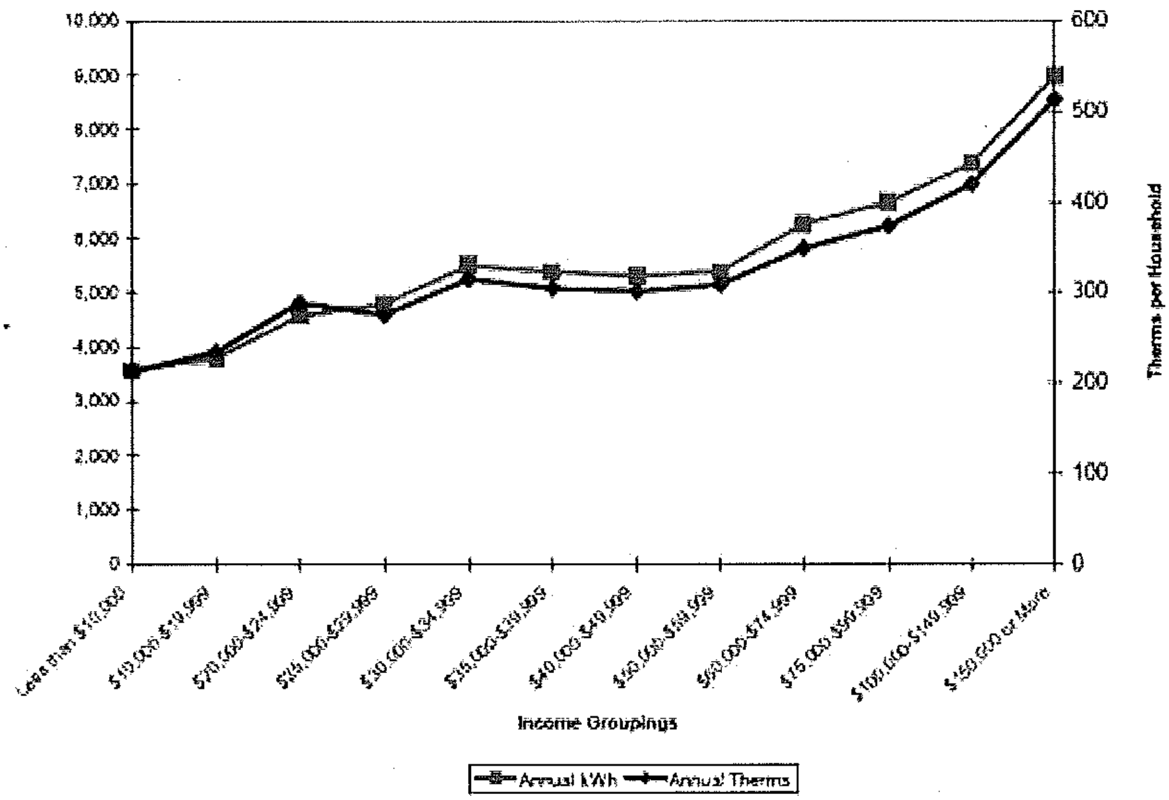
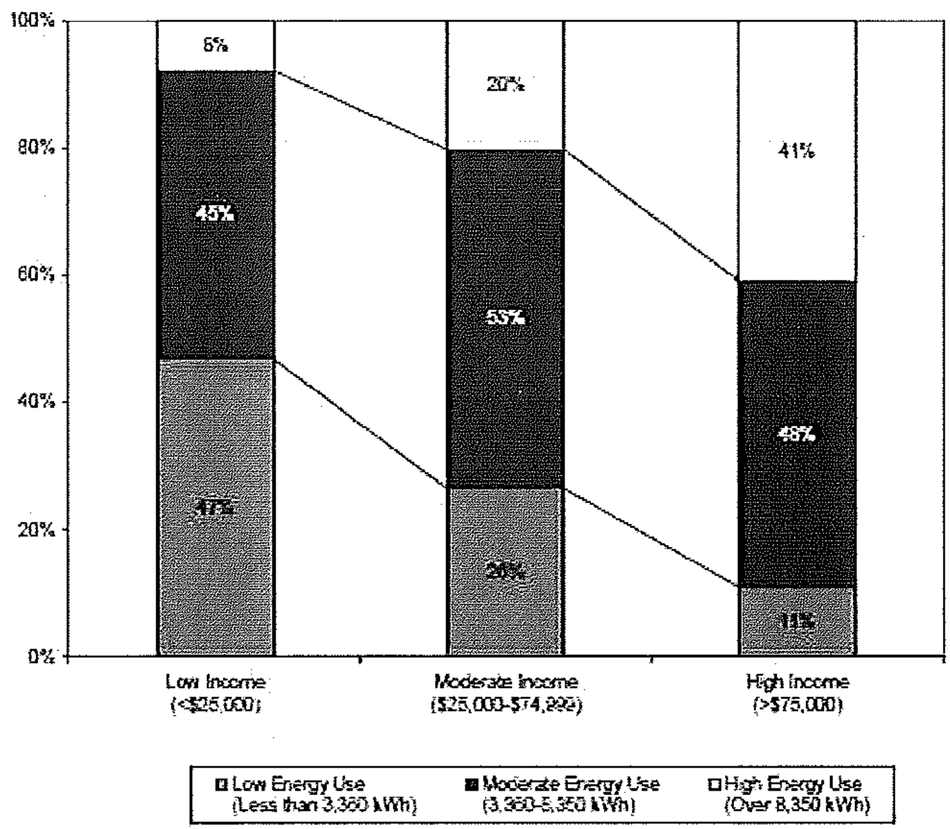


Figure 4 provides a more finite breakdown of electricity consumption by income grouping that suggests that roughly half of low income residents (<$25,000) are low energy users.

[10] Marcus, W.B. & G. Ruszovan (2007). "Know Your Customers": A Review of Load Research Data and Economic Demographic, and Appliance Saturation Characteristics of California Utility Residential Customers. http://www.jbsenergy.com/downloads/Know_Your_Customers_Paper.pdf

[11] Atamturk, N. Zafar, M. & P. Clanon (2012) Electricity Use and Income: A Review. California Public Utilities Commission. http://www.cpuc.ca.gov/nr/rdonlyres/609bc107-ef3c-4864-ad56-e964884d51ac/0/ppdelectricityuseincome.pdf

Figure 4: California residential electricity consumption by income grouping (2010)[12]



Q. What should readers conclude from the KEMA study cited above?

A. The KEMA study suggests that low-income users are likely to be low-usage consumers. This again, should not be surprising given the difficult choices low-income customers have to make on a daily basis. Ideally, data specific to KCPL's service territory should be utilized to inform this discussion. Mr. Rush's biased analysis notwithstanding, no data exists on KCPL's residential customer electricity usage broken down by income. However, there is substantial economic data currently available on KCPL's service territory that can provide a sense of the potential impact.

[12] Ibid.

Q. Do we have an idea of the current percentage of residents living in poverty in KCPL's service territory?

A. Yes, we do. The U.S. Census Bureau's 5-Year Estimates from the American Community Survey define poverty:

> by comparing annual income to a set of dollar values called poverty thresholds that vary by family size, number of children and age of householder. If a family's before tax money income is less than the dollar value of the threshold, then that family and every individual in it are considered to be in poverty. For people not living in families, poverty status is determined by comparing the individual's income to his or her poverty threshold.[13]

In December, 2014, the U.S. Census Bureau released their latest data set on Small Area Income and Poverty Estimates (SAIPE) for 2013. SAIPE estimated that 15.8% of Missouri citizens of all ages were living in poverty.[14] Further analysis shows that there were only four out of thirteen counties that KCPL services that had a lower percentage of its overall population living in poverty than the Missouri average, as seen in table 4.

[13] U.S. Census Bureau (2015) State & County QuickFacts: People of all ages in poverty. http://quickfacts.census.gov/qfd/meta/long_PVY020210.htm

[14] U.S. Census Bureau (2014) Small Area Income and Poverty Estimates (2013) http://www.census.gov/did/www/saipe/data/index.html

Table 4: Percentage of people of all ages in poverty in counties KCPL operates in[15]

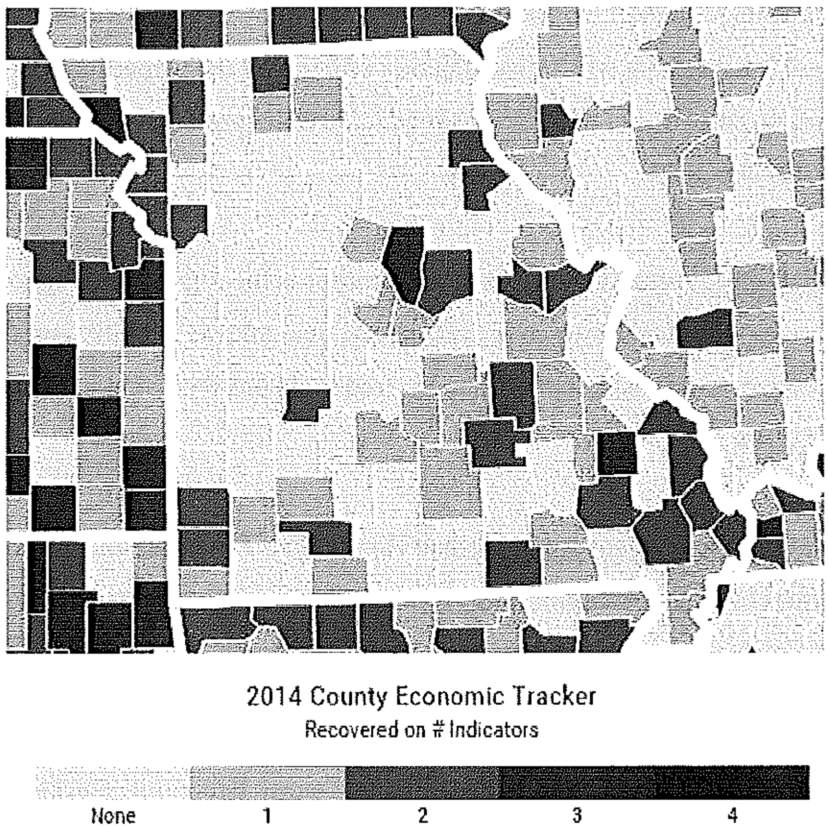
Carroll County	Howard County	Livingston County	Saline County
17.7%	15.9%	17.2%	18.4%
Cass County	Jackson County	Pettis County	
9.2%	17.2%	20.1%	
Chariton County	Johnson County	Platte County	
16.8%	17.7%	7.7%	
Clay County	Lafayette County	Randolph County	
10.0%	12.7%	22.4%	

Q. Please describe the current economic climate for KCPL's residential ratepayers.

A. On January 12, 2015 The National Association of Counties (NACo) issued the following press release: *Economic recovery remains sluggish across counties despite signs of national boom.*[16] This press release was accompanied by a link to the 2014 County Economic Tracker which utilizes data from Moody's Analytics, U.S. Bureau of Labor Statistics, U.S. Bureau of Economic Analysis and the U.S. Census Bureau to give a sense of the unevenness in economic growth in Missouri relative to some of the national trends. Figure 5 shows that breakdown in Missouri.

[15] Ibid.
[16] NACo (2015) Economic recovery remains sluggish across counties despite signs of national boom. http://www.naco.org/newsroom/Documents/Press%20Release%20Documents/CountyEconTracker011215RELEASE.pdf

Figure 5: 2014 County Economic Tracker for Missouri



Q. Please continue.

A. Figure 1 shows each county within Missouri and color codes them based on four "recovery" indicators which include:

> **Jobs Recovered:** Jobs recovered represents the total wage and salary jobs, whether full or part-time, temporary or permanent in a county economy and whether or not those jobs were recovered to the prerecession amount by 2014. It counts the number of "jobs," not "employed people" for all employers in a county economy.

Unemployment Rate Recovered: Unemployment rate represents the percentage of total workforce who are unemployed and are looking for a paid job (under the U-3 classification utilized by the Department of Labor) and whether or not that rate has recovered to its pre-recession low level (2007) by 2014.

GDP Recovered: County economic output is the total value of goods and services produced by a county economy, also known as GDP, and then whether or not the county has recovered to its pre-recession levels of GDP by 2014.

Home Prices Recovered: Median Home Sales Prices are median sales prices of existing single-family homes, and then whether or not the county has recovered to its pre-recession levels of median home sales by 2014.[17]

Table 5 has adapted information utilized by the County Economic Tracker to highlight each county in which KCPL operates to give a sense of what residential ratepayers currently are experiencing.

[17] NACo County Explorer: Mapping County Data State Search http://explorer.naco.org/

Table 5: KCPL economic tracker of serviced counties[18]

County	Population	Jobs Recovered	Unemployment Rate Recovered	GDP Recovered	Home Prices Recovered
Carroll	9,127	No	No	No	No
Cass	100,641	No	No	No	No
Chariton	7,628	No	No	No	No
Clay	230,473	Yes	No	Yes	No
Howard	10,257	No	No	No	Yes
Jackson	679,996	No	No	No	No
Johnson	54,572	No	No	No	No
Lafayette	32,943	No	No	No	No
Livingston	14,871	No	No	No	No
Pettis	42,205	No	No	No	No
Platte	93,310	Yes	No	Yes	No
Randolph	24,940	No	No	No	No
Saline	23,252	No	No	No	No
Total Counties	13	2	0	2	1
Total Population (within counties)	1,324,215	2 out of 13 7.05%	0 out of 13 0.00%	2 out of 13 7.05%	1 out of 13 0.77%

These results suggest that the majority of KCPL's counties still are recovering by important economic indicators.

Staff expert/witness Michael Stahlman presented similar results in the Staff Cost of Service Report, but with a comparative evaluation of KCPL's rates during that same period (2007-2015). Mr. Stahlman's figure and table are reprinted here in Figure 6 and Table 6 below:

[18] Ibid.

Figure 6: Comparison of Weekly Wages, CPI, PPI and Electric Rates[19]

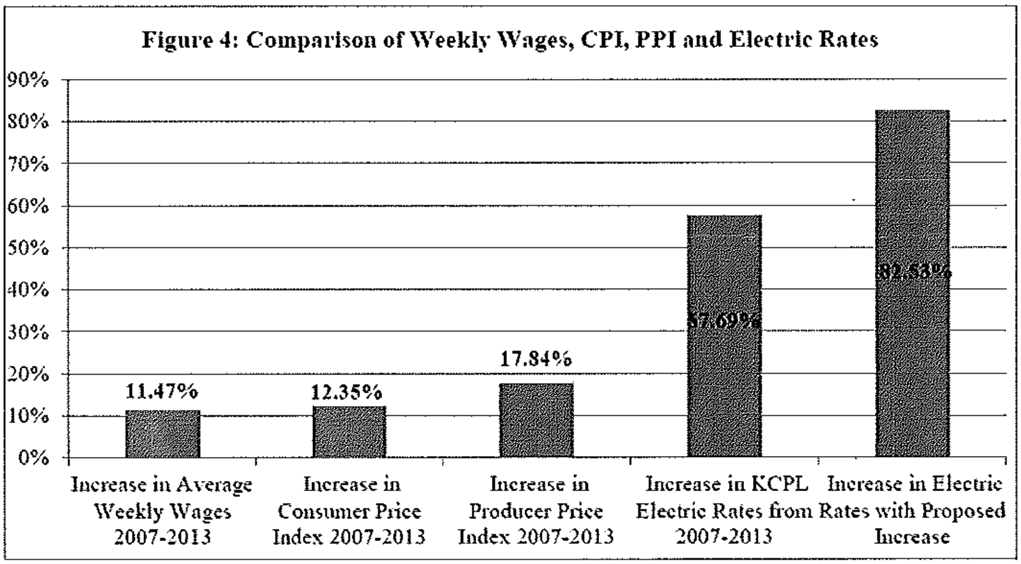


Table 6: Empire Rate Case History 2007 - 2014[20]

Table 1: KCPL Rate Case History 2007 - 2015

Case Number	Effective Date	Dollar Value	Percent Increase
ER-2006-0314	1-Jan-07	$50,616,638	10.46%
ER-2007-0291	1-Jan-08	$35,308,914	6.50%
ER-2009-0089	1-Sep-09	$95,000,000	16.16%
ER-2010-0355	4-May-11	$34,817,199	5.25%
ER-2012-0174	26-Jan-13	$67,390,893	9.64%
Total Dollars		$283,133,644	
Total Compounded Increase			57.69%
ER-2014-0370	(Proposed)	$120,900,000	15.75%
Total with Proposed		*$404,033,644*	*82.53%*

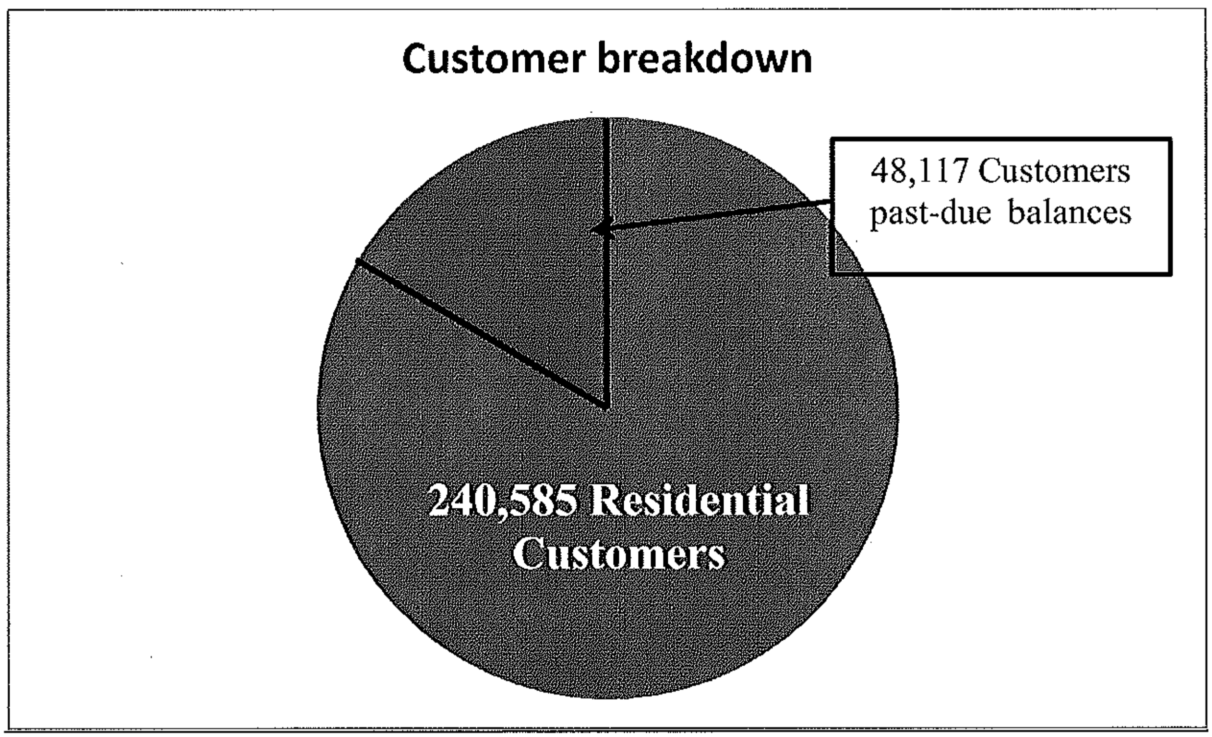
[19] ER-2014-0370 Michael Stahlman, Missouri Public Service Commission Staff Report Revenue Requirement Cost of Service p. 11.
[20] Ibid.

KCPL's residential ratepayers' wages are not keeping up with KCPL's rate increases. This is especially troubling considering the already considerable size of past-due balances among residential ratepayers. According to Mr. Rush:

> As of October 1, 2014, for example, more than 20% of residential KCP&L accounts have past-due balances.

Figure 7 presents what exactly twenty percent of KCPL's customers would represent in a visual context similar to what was done with the net-metering population in KCPL's service territory from figure 1. The actual number of customers with past-due balances will be greater than what is shown below.

Figure 7: Illustrative estimate of KCPL customers with past-due balances



Q. Please summarize KCPL's proposed Economic Relief Pilot Program (ERPP) proposal.

A. The Company is proposing the following changes:

- Double the amount of available funds from $630,00 to $1,260,000
  - Half is funded by ratepayers and half by shareholders
- Raise the participants from 1,000 to 1,500
- Increase monthly bill credit from $50 to $65

Q. Have concerns been raised about this proposal?

A. Yes, Staff has opposed the increase on the grounds that the Company has not fully expended the funds it has collected to date. OPC shares this concern, as well as the program's continued status as a pilot (seven years now). According to the response received from the Company to OPC data request ER-2014-0370 2047, the last evaluation of the Program was in 2012. Though the executive summary maintains that the program has been successful it also states that the program rarely reaches its cap of enrollees. Further dialogue with stakeholders and the Company appears to be warranted.

Q. Are there any additional factors the Commission should consider in determining whether to raise the residential customer charge by 177 percent?

A. Yes, as the Commission is well aware, KCPL is proposing to place costs related to their Clean Charging Network system into base rates. Putting aside policy issues over the merits of regulated or unregulated status in electric charging infrastructure there are two points from that proposal that are worth noting within the context of the increased residential customer charge.

First, it is estimated that an electric vehicle (EV) owner consumes at least 25% more electricity than a non-electric vehicle owner.[21] Under KCPL's proposed rate design, the EV owner would clearly benefit from having a smaller volumetric rate. This brings me to my second point, that EV ownership has traditionally, and will likely be in the near future concentrated and marketed towards affluent demographics.[22,23,24] Taken as a whole, the collective results of these additional costs and rate design proposals can be perceived as an increasingly regressive outcome for most residential ratepayers and low-income ratepayers in particular.

III. LOW-INCOME WEATHERIZATION

Q. What is DE's basis for proposing that KCPL recover future LIWAP expenses in base rates?

A. DE witness John Buchanan makes this argument based on concerns over "continuity." At the moment all gas and electric investor-owned utilities in Missouri have some amount of weatherization funding in their base rates except KCPL and Greater Missouri Operations KCPL. The latter two utilities recover their LIWAP costs through their Commission approved MEEIA.

Mr. Buchanan points out that an electric utility is not mandated to have a MEEIA and that to avoid any potential continuity issues of LIWAP funding in the future the proper recovery of those funds should remain in base rates.

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[21] Regulatory Assistance Project (RAP) & Vermont Energy Investment Corporation (2015) In the Driver's Seat: How Utilities and Consumers Can Benefit from the Shift to Electric Vehicles. p. 4. http://www.raponline.org/event/in-the-drivers-seat-how-utilities-and-consumers-can-benefit-from-the-shift-to-electric

[22] Who are the participants in the EV project (2013) The Electric Vehicle Project http://www.theevproject.com/cms-assets/documents/128842-80098.devproj.pdf

[23] G. Tal, el al. (2013) Who is buying electric cars in California? UC Davis Institute of Transportation Studies Research Report-UCD-ITS-RR-13-02. https://merritt.cdlib.org/d/ark:%252F13030%252Fm56692z3/1/producer%252F2013-UCD-ITS-RR-13-02.pdf

[24] Washington Policy Center (2015) Nearly half of electric car tax breaks go to state's wealthiest 10 percent http://washingtonpolicy.org/sites/default/files/Myers-%20Data%20Show%20Nearly%20Half%20of%20Washington%E2%80%99s%20Electric%20Car%20Tax%20Breaks.pdf

Mr. Buchanan then proposes that KCPL resume recovery of LIWAP costs in base rates following the conclusion of KCPL's MEEIA Cycle I and cease recovery of these costs in future MEEIA applications.

Q. What is OPC's position?

A. OPC supports this proposal.

Q. Will KCPL still be able to recover costs related to the throughput disincentive if LIWAP is removed from MEEIA?

A. It is Public Counsel understanding that no utility recovers costs related to the throughput disincentive in a MEEIA portfolio for LIWAP programs. Because of its legacy status, it was assumed that LIWAP would have been approved absent a MEEIA portfolio being in place.

IV. SOLAR REBATES

Q. Please update the Commission as to the status of your investigation.

A. OPC is still investigating potential affiliate transaction violations regarding the prudency of solar rebates by the unregulated affiliate, KCP&L Solar and the regulated entity KCPL.

Q. Does this conclude your testimony?

A. Yes.